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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant : Umbaugh  
Serial Number : 10/621,618  
Filing Date : July 18, 2003  
For : SEED GERMINATION AND  
PLANT SUPPORTING UTILITY  
Group Art Unit : 3643  
Examiner : Parsley, David J.  
Date Of Appeal : August 8, 2005

APPLICANT'S BRIEF ON APPEAL  
UNDER 37 CFR 41.37

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or Registered Representative

[Signature]  
Signature

12-8-05  
Date

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REAL PARTY IN INTEREST

The inventor, Raymond E. Umbaugh, Jr., is the real party in interest in these proceedings (i.e., he is the owner of the entire right, title and interest in and to this Application and invention).

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF CLAIMS

All claims in this Application stand rejected by the Examiner in view of prior art. Only independent claims 1, 9 and 15 have been amended during prosecution (each only once, after the first official action), the remaining claims being as originally filed.

After the first official action, independent claims 1, 9 and 15 were amended to specify in different ways that the mesh of the seed germination and plant supporting utility of this invention are secured at both ends of the spacer (or spacer ring per claim 15) and that the mesh has mesh openings of a size small enough to directly support a seed thereon at one side and mesh openings of a size small enough to be securely engaged by plant root growth therethrough at the other side.

All of the claims in this Application (claims 1 through 20), as last presented following the first official action, are on appeal herein.

STATUS OF AMENDMENTS

No amendments have been filed since the Final  
Rejection in this Application.

SUMMARY OF CLAIMED SUBJECT MATTERINDEPENDENT CLAIMS SUBJECT MATTER

All of the independent claims in this Application (claims 1, 9 and 15) are directed to a seed germination and plant supporting utility as described on pages 8 (line 16) through 12 (line 12), page 15 (lines 3 through 24), and pages 18 (line 12) and 19 of the Specification, and as shown in Figures 2 through 4 and 7 (second and third embodiments shown in Figures 4 and 7, respectively). As specified in independent claim 1, the utility comprises a spacer having a central opening between first and second sides thereof (see Specification pages 8 (lines 19 through 22), page 9 (lines 18 through 20), page 10 (lines 10 through 16), page 11 (lines 8 and 9), all referring to reference numbers 39 (spacer), 35 and 37 (spacer sides), and 41 (spacer opening defining a passageway) in Figures 2 and 3; regarding the second embodiment, page 11 (line 13) through page 12 (line 4) referring to Figure 4, reference numbers 39, 63 and 65; and regarding the third embodiment, reference number 39 of Figure 7). A mesh is secured on both sides of the spacer (see Specification pages 8 (line 19) through page 12 (line 12) referring to Figures 1 through 4, reference numbers 33 and 34 in Figures 2, 3 and 7, or reference

numbers 33, 34 and 67 in Figure 4). The mesh is held spaced apart a selected distance by the spacer and enshrouds the central opening thereof (see Specification page 9, lines 18 through 20). The mesh has mesh openings of a size small enough to directly support a seed thereon at the first side of the spacer and to be securely engaged by plant root growth therethrough at the second side of said spacer (see Specification page 9 (line 20) through page 10 (line 9), and page 12, lines 5 through 12).

As specified in independent claim 9, the utility includes a first spacer having a passageway therethrough between first and second ends of the spacer (see Specification pages 8 (lines 19 through 22), page 9 (lines 18 through 20), page 10 (lines 10 through 16), page 11 (lines 8 and 9), all referring to reference numbers 39 (spacer), 35 and 37 (spacer sides), and 41 (spacer opening defining a passageway) in Figures 2 and 3; regarding the second embodiment, page 11 (line 13) through page 12 (line 4) referring to Figure 4, reference numbers 39, 63 and 65; and regarding the third embodiment, reference number 39 of Figure 7). A first mesh swathe is positioned at the first end of the spacer and has mesh openings of a size small enough to directly



support a seed thereon (see Specification pages 8 (line 19) through page 12 (line 12) referring to Figures 1 through 4, reference number 33 in Figures 2, 3 and 7, or reference numbers 33 and 67 in Figure 4; and Specification page 9 (line 20) through page 10 (line 9), and page 12, lines 5 through 12). A second mesh swathe is positioned at the second end of the spacer and has mesh openings of a size small enough to be securely engaged by plant root growth therethrough (see Specification pages 8 (line 19) through page 12 (line 12) referring to Figures 1 through 4, reference number 34 in Figures 2, 3 and 7, or reference numbers 34 and 67 in Figure 4; and Specification page 9 (line 20) through page 10 (line 9), and page 12, lines 5 through 12). First and second retainers are securable to the spacer at the ends thereof adjacent to the first and second mesh swathes to retain the mesh swathes at their respective ends of the spacer, each retainer having an opening therethrough in correspondence with the spacer passageway when associated with the spacer (see Specification page 9 (lines 10 through 15) and page 10 (line 18) through page 11 (line 8), all referring to Figures 2 and 3, reference numbers 45 and 47; page 11 (line 20) through page 12 (line 4), referring to Figure 4, reference numbers 45, 47 and 71;

and page 15 (lines 9 through 23), referring to Figure 7, reference numbers 129 and 131 at 125/127/107).

As specified in independent claim 15, the utility comprises a spacer ring having a central opening therethrough between opposite ends thereof, the spacer ring having inside and outside diameters (see Specification pages 8 (lines 19 through 22), page 9 (lines 18 through 20), page 10 (lines 10 through 16), page 11 (lines 8 and 9), all referring to reference numbers 39 (spacer), 35 and 37 (spacer sides), and 41 (spacer opening defining a passageway) in Figures 2 and 3; regarding the second embodiment, page 11 (line 13) through page 12 (line 4) referring to Figure 4, reference numbers 39, 63 and 65; and regarding the third embodiment, reference number 39 of Figure 7). First and second mesh, each with a diameter greater than the inside diameter of the spacer ring, are positioned at the opposite ends of the spacer ring, the first mesh having mesh openings of a size small enough to directly support a seed thereon and the second mesh having mesh openings of a size small enough to be securely engaged by plant root growth therethrough (see Specification pages 8 (line 19) through page 12 (line 12) referring to Figures 1 through 4, reference numbers 33 and 34 in Figures 2, 3

and 7, or reference numbers 33, 34 and 67 in Figure 4, and Specification page 9 (line 20) through page 10 (line 9), and page 12, lines 5 through 12). Retaining means at each of the opposite ends of said spacer ring are provided for retaining the first and second mesh at the ends of the spacer ring (see Specification page 9 (lines 10 through 15) and page 10 (line 18) through page 11 (line 8), all referring to Figures 2 and 3, reference numbers 45 and 47; page 11 (line 20) through page 12 (line 4), referring to Figure 4, reference numbers 45, 47 and 71; and page 15 (lines 9 through 23), referring to Figure 7, reference numbers 129 and 131 at 125/127/107). The first and second mesh are held spaced apart a selected distance by the spacer ring and enshroud the central opening (see Specification page 9, lines 18 through 20).

#### MEANS PLUS FUNCTION CLAIM LIMITATIONS

As permitted by 35 USC 112, sixth paragraph, means plus function claim language is found in independent claim 15 ("retaining means at each of said opposite ends of said spacer ring for retaining said first and second mesh at said opposite ends of said spacer ring"). Structure or material corresponding thereto is described in the Specification at: page 9 (lines 10 through 15) and

page 10 (line 18) through page 11 (line 8), all referring to Figures 2 and 3, reference numbers 45 and 47; page 11 (line 20) through page 12 (line 4), referring to Figure 4, reference numbers 45, 47 and 71; and page 15 (lines 9 through 23), referring to Figure 7, reference numbers 129 and 131 at 125/127/107).

GROUND OF REJECTION TO BE REVIEWED

1) Whether claims 1 through 3, 6, 7, 9 through 11, 13, and 15 through 18 (which include all three independent claims 1, 9 and 15) are anticipated under 35 USC 102(b) by the teachings in the Japanese patent reference No. 4-88928 (in particular by the English language Abstract and Constitution and Drawings thereof).

2) Whether claims 4 and 5 are unpatentable under 35 USC 103(a) over the teachings in the Japanese patent reference No. 4-88928 (English language Abstract and Constitution and Drawings thereof) in view of the teachings in U.S. Patent No. 4,057,930 to Barham.

3) Whether claims 8, 12, 14 and 19 are unpatentable under 35 USC 103(a) over the teachings in the Japanese patent reference No. 4-88928 (English language Abstract and Constitution and Drawings thereof) in view of the teachings in U.S. Patent No. 5,225,342 to Farrell.

4) Whether claim 20 is unpatentable under 35 USC 103(a) over the teachings in the Japanese patent reference No. 4-88928 (English language Abstract and Constitution and Drawings thereof) in view of the teachings in U.S. Patent No. 5,225,342 to Farrell and further in view of the teachings in European Patent Application publication No. 0052264.

ARGUMENTOpening Comments

Before undertaking the merits of the specific claims rejections applied by the examiner under 35 USC 102 and 103, Applicant herein objects to the primary reference applied in all such specific rejections. The primary reference forming the basis of all rejections of claims in this Application is a Japanese patent document, the teachings of which are primarily found in the translated patent Abstract and Constitution and in the original drawings (see Japanese Document JP 04088928 A). The remainder of the document is presented by the Examiner in Japanese without translation, and is thus not felt to be a part of the teachings applicable in the Appeal.

A prima facie case of anticipation under 35 USC 102(b) requires that the reference teach every aspect of the claimed invention either directly or inherently (there is no implication in the Official Actions that the Examiner has relied upon "inherent" features) (MPEP section 706.02; *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051,1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim (*Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913,

1920 (Fed. Cir. 1989). The elements must be arranged as required by the claims (In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)).

A prima facie case of obviousness requires that three criteria be met: First, that some suggestion or motivation, either in the references themselves or in the generally available knowledge of skilled artisans, to modify the reference or combine the teachings be present; Second, success must be reasonably expected in the combination; and Third, the first two elements must be found in the prior art and not in the Applicant's disclosure (see In re Vaeck, 947 F2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)).

Moreover, and pertinent here since the drawings of the Japanese Document are so heavily relied upon, drawings are enabling as prior art if they show all of the claimed structural features and how they are put together (Jockmus v. Leviton, 28 F.2d 812 (2d Cir. 1928); MPEP sections 2121.04 and 2125). Such drawings must be evaluated for what they reasonably disclose and suggest to one of ordinary skill in the art (In re Aslanian, 500 F.2d 911, 200 USPQ 500 (CCPA 1979)). Of course, all such determinations are made at the time the invention was made to avoid impermissible hindsight (W.L. Gore and

Associates v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed. Cir 1983)).

It is felt that the Japanese document is incapable of meeting the foregoing requirements (prima facie presentation and enabling prior art requirements) for anything other than a sprout culturing vessel including a bottom, wherein sprouts are cultured on filter media (as is quite standard in that particular industry) as taught in the Constitution of the reference (see also FIGURES 7a through 7f). The remaining teachings (language teachings) are quite brief, highly uncertain in scope and content (and in some cases cryptic), and are thus susceptible to multiple and incongruous interpretations. The drawings are likewise subject to various interpretations, and their meaning is far from clear. It is felt that this reference can not function as enabling to those skilled in the art for any but a very narrow purpose which is not relevant at all to the purposes and teachings in this Application, and that the reference should thus be withdrawn.

Moreover, where a reference such as this is capable of multiple and conflicting interpretations with respect to the very features applied, Applicant would request



herein a ruling that the reference is not enabling as prior art.

Additionally, to the limited degree that the Japanese document teaches anything, what is taught is not analogous to the subject matter at issue. To rely on a reference for rejection of claims to an invention, the reference must be in the field of endeavor disclosed or reasonably pertinent to the particular problem with which the Applicant's invention is concerned. (In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)). Herein, the Applicant's invention is concerned with seed germination and plant support within a single utility. The reference, as noted above, is concerned with sprouting and sprout harvesting. This is not a reference which would have commended itself to an inventor's attention in considering the problem of both germination and support in a single utility (In re Clay, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-1061 (Fed. Cir. 1992)). Application of this reference is thus traversed.

In this same regard, and in support of the argument that the reference is not analogous, the Japanese document would seem to of necessity teach away from one of the purposes of this invention as claimed, that of root growth stimulation and engagement for purpose of

plant support. Such would significantly encumber the ready harvesting of sprouts, as apparently is the purpose of the devices shown in the Japanese document (see FIGURES 7a through 7c thereof).

Rejection Under 35 USC 102(b)

Claims 1 through 3, 6 and 7

The Examiner has rejected independent claim 1 and dependent claims 2, 3, 6 and 7 in this Application under 35 USC 102(b) as being anticipated by the teachings in the Japanese Patent Document No. JP 04088928 A.

The application of this reference depends almost solely on the Examiner's interpretation of the drawings therein. From this it is clear only that each of the seed beds taught therein includes a frame and a lower seed bed, each of the beds being stackable one on top of the next. There is no teaching of suggestion therein of mesh at both ends of a seed bed frame 2.

Amended claim 1 is clearly not anticipated by the teachings in the Japanese document. The "mesh" (if indeed it is a mesh; it is referred to as a "filter 5" in the document) is not secured on both open ends of the frame 2. Claim 1 specifies a spacer having mesh secured on both sides thereof. The Examiner in this regard refers to identification numbers 1, 2, and 3 through 5 of Figure

6 in the Japanese document as support for this teaching. Number 1 is identified as the culturing vessel as a whole, number 4 as a "main body", while number 5 is referred to as a "filter" (see the Constitution of the Japanese document). Identifying numbers 2 and 3 are not specifically identified at all. It is extremely difficult to identify what "2" and "3" refer to given the numerous occurrences and placements thereof in the various figures.

What is clear is that mesh is not "secured on" both sides of the main body 4 (if that is what's intended by the Examiner). The frames are merely stacked, with unspecified consequences. It would appear that the "filter 5" is not secured at all but merely lies at the bottom of the vessel 1. The Examiner in later reference alleges that identifying numbers 1d, 2c, 5a and 4a of the Japanese document show retainers for hold the mesh, but such is not stated anywhere in the Abstract or Constitution of the reference, nor do the drawings indisputably show such retention. This usage of the Figures in the Japanese document can only be understood as a case of improper utilization of the Applicant's teachings to support the interpretation and application of the reference in contravention of well established law

(see, W.L. Gore and Associates v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed. Cir 1983)).

Claim 1 further specifies that the mesh are held apart by the spacer a selected distance thus enshrouding the central opening through the spacer, and that the mesh openings be of a size to support seed at one spacer side and to be securely engaged by plant root growth therethrough at the other side of the spacer. The Examiner points to nothing in particular in the available teachings in the Japanese document to support his allegation that these limitations are taught (in itself felt to be error, since the ability of Applicant to respond in such case is severely hampered), and it is felt that no such particular teaching can be found in the reference. In fact, the reference suggests that engagement by plant root growth at any part of the vessel would be contrary to the purpose of the invention (ease of sprout harvest), i.e., each frame/seed bed structure taught in the Japanese document is utilized only for plants on the filter 5 and thus no separated seed support/root support functions are provided by the discrete structures shown in the reference (nor would such be desirable).

As noted above, to support a claim rejection under 35 USC 102(b) a reference teach every aspect of the claimed invention either directly or inherently (there is no implication in the Official Actions that the Examiner has relied upon "inherent" features) (MPEP section 706.02; *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051,1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim (*Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claims (*In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Such is not the case here.

In view of these requirements, is thus felt that claim 1 should be allowed over the reference, and reversal of the Examiner's rejection on this ground is respectfully requested.

Regarding claim 2, as noted above no clear showing of a retainer for hold mesh on a spacer is felt to be present in the Japanese document, much less first and second retainers at opposite sides or a spacer for holding mesh thereon as specified by claim 3. Regarding claim 6, the examiner alleges with absolutely no teaching that different mesh sizes at opposite sides of a spacer

can be deduced from the teachings in the Japanese document. As for claim 7, for the same reasons as above addressed, the Japanese reference teaches no maintenance of mesh between abutting interfacing surfaces of first and second spacer components (thus essentially providing a three mesh utility). Both because these claims are dependent upon claim 1 and because what is specified in these claims is not taught by the applied reference, reversal of the Examiner's rejection of these claims is requested.

Rejection Under 35 USC 102(b)

Claims 9 through 11 and 13

The Examiner has rejected independent claim 9 and dependent claims 10, 11 and 13 in this Application under 35 USC 102(b) as being anticipated by the teachings in the Japanese Patent Document No. JP 04088928 A.

Independent claim 9 was rejected for substantially all the same reasons as independent claim 1, the Examiner relying on the same alleged teachings in the Japanese document (the claim was not separately addressed in any regard despite the differences in scope of the two claims). The claim specifies a spacer having a passageway therethrough, first and second mesh swathes positioned at different ends of the spacer, and first and

second retainers securable to the spacer ends, each spacer having an opening therethrough corresponding to the spacer passageway. Mesh opening sizes are again specified for support and root engagement.

All of the above arguments with respect to independent claim 1 apply hereto. Moreover, the additional structure specified in claim 9 for the retainers (i.e., the openings therethrough) was summarily addressed by the Examiner, concluding that they are taught at Figure 6 numbers 1d, 2c, 4a and 5a in the Japanese document without specifying what specifically about these reference numerals might be interpreted as equivalent structure to the claimed structure. This application, under the same law as cited above with regard to claim 1, is felt to be error (see MPEP section 706.02, and *W.L. Gore and Associates v. Garlock, Inc.*, *Verdegaal Bros. v. Union Oil Co. of California*, *Richardson v. Suzuki Motor Co.*, and *In re Bond*, supra). Thus, it is felt that claim 9 should be allowed over the reference, and reversal of the Examiner's rejection on this ground is respectfully requested.

Claim 10 is rejected over indeterminate teachings as well. The claim specifies first and second spacer, a third retainer and third mesh swathe, the second retainer

associable with both spacers and having an opening therethrough in correspondence with the spacer passageway. The Examiner has utilized the same teaching vis-à-vis retainers as noted above in rejection of this claim. Claim 11 (dependent on claim 10) and 13 each specify that certain of the retainers have retaining lips (57 in the FIGURES of this Application) adjacent to the retainer openings and abutting the spacer ends to anchor the mesh swathes. The Examiner cites no particular structure in the Japanese reference to support rejection of these claims, merely repeating the claim language and asserting the structures presence. Both because these claims are dependent upon claim 9 and because what is specified in these claims is not taught by the applied reference, reversal of the Examiner's rejection of these claims is requested.

Rejection Under 35 USC 102(b)

Claims 15 through 18

The Examiner has rejected independent claim 15 and dependent claims 16 through 18 in this Application under 35 USC 102(b) as being anticipated by the teachings in the Japanese Patent Document No. JP 04088928 A.

Independent claim 15 was rejected for substantially all the same reasons as independent claims 1 and 9, the



Examiner relying on the same alleged teachings in the Japanese document (again the claim was not separately addressed in any regard despite the differences in scope of the claims). The claim specifies a spacer ring having a central opening therethrough between ends the ring having inside and outside diameters. First and second mesh having a diameter greater than the inside diameter of the spacer ring are retained by retaining means at each end of the spacer ring. Mesh opening sizes are again specified for support and root engagement, as is spaced relationship of the mesh and enshroudment of the spacer ring opening.

All of the arguments above with respect to independent claims 1 and 9 apply hereto. Moreover, the additional structure specified in claim 15 (ring shaped spacer, mesh having a diameter, diameter of mesh greater than inside diameter of the spacer ring, etc.) was for the most part not addressed or addressed indirectly (with respect to other claims - see the discussion below respecting dependent claim 4). At one point the Examiner asserts, without more, that a ring-shaped spacer configuration is taught in Figures 6 and 7 of the Japanese reference (April 6, 2005 Office Action, page 5, paragraph 2) without specifying what specifically about

these Figures might be interpreted as equivalent structure to the claimed structure. This application of the Japanese document under 35 USC section 102(b), and under the same law as cited above with regard to claims 1 and 9, is felt to be error (see MPEP section 706.02, and *W.L. Gore and Associates v. Garlock, Inc.*, *Verdegaal Bros. v. Union Oil Co. of California*, *Richardson v. Suzuki Motor Co.*, and *In re Bond*, supra). Thus, it is felt that claim 15 should be allowed over the reference, and reversal of the Examiner's rejection on this ground is respectfully requested.

Claim 16, directed to first and second removable retainer caps having an opening therethrough receivable over the ends of the spacer ring, is rejected over indeterminate teachings in the Japanese document (citing Figure 6 as the teaching). Claim 17, directed to differing mesh sizes of the first and second mesh is also rejected over the teaching in Figures 4 to 6 of the reference without further explanation. Claim 18 is directed to a three mesh structure similar to claim 10 but with additional limitations inherent to the identification of the spacer as a ring. This claim is summarily rejected by the Examiner together with claim 10 citing very little structure in support thereof. This is

felt to be error. Both because these claims are dependent upon claim 15 and because what is specified in these claims is not taught by the applied reference, reversal of the Examiner's rejection of these claims is requested.

Rejection Under 35 USC 103(a)

Claims 4 and 5

Dependent claims 4 and 5 are rejected under 35 USC 103(a) as being unpatentable over the teachings in the Japanese document cited above in view of the teachings in the U.S. Patent to Barham (U.S. Patent No. 4,057,930). The deficiencies in the Japanese document are set forth hereinabove. The Barham patent is cited by the Examiner for the proposition that the mesh may be fiber (column 4, line 60).

Claim 4 specifies that the spacer is a ring having an inside diameter while the mesh includes first and second fiber swathes each with a diameter greater than the inside diameter. Claim 5 (dependent on claim 4) specifies first and second removable retainer rings receivable over the sides of the spacer to hold the swathes. These features are said to be taught in the Japanese document at Figures 6 and 7 (the same conclusive applications as cited hereinabove).

This application of the Japanese document under 35 USC section 103(a), and under the same law as cited above with regard to claims 1, 9 and 15 above, is felt to be error (see MPEP section 706.02, and *W.L. Gore and Associates v. Garlock, Inc.*, *Verdegaal Bros. v. Union Oil Co. of California*, *Richardson v. Suzuki Motor Co.*, and *In re Bond*, supra). Moreover, a prima facie case of obviousness has not been made because no rationale has been convincingly identified by the Examiner of the suggestion or motivation to modify the references or combine the teachings thereof. This motivation is found solely within Applicant's disclosure (see *In re Vaeck*, supra). Thus, because no prima facie case of obviousness has been made, because these claims are dependent upon allowable claim 1, and because what is specified in these claims is not taught by the applied references, it is felt these claims should be allowed over the references, and reversal of the Examiner's rejection on this ground is respectfully requested.

Rejection Under 35 USC 103(a)

Claims 8, 12, 14 and 19

Dependent claims 8, 12, 14 and 19 are rejected under 35 USC 103(a) as being unpatentable over the teachings in the Japanese document cited above in view of the

teachings in the U.S. Patent to Farrell (U.S. Patent No. 5,225,342). The deficiencies in the Japanese document are set forth hereinabove.

The Farrell patent is cited for the proposition that a maintenance platform is taught (claims 8, 12 and 19) and for the proposition that ring shaped retainers may be used (claim 14). The Farrell patent teaches a plant interface at FIGURES 7A through 7C for receiving a root growth apparatus 306 at bottom retainers 230/240 situated below carousel 250 which is in turn below housing 260. Retaining bracket 265 and carousel 250 hold shoot retainers 330 in opening 268/252 therethrough, bracket 265 being smaller in diameter than the inner diameter of housing 260. The unit is held together by retainer ring 264 engaging lip 266 of housing 260 and threads 270 of unit 206. Bracket 265 is held up by the retainers 330 (otherwise it would fall to the carousel 250) and is thus not secured at the end of housing 260 (and particularly not secured thereat by cap 278). The casing 202 is not for receipt of spacers but of root bundles.

Overall, the Farrell apparatus is directed to the problems encountered in rootless (i.e., soil free) growing systems. There is little relationship between the systems in the Japanese document (a filter media sprout

growth and harvesting arrangement) and the Farrell apparatus, and thus a prima facie case of obviousness has not been made because no suggestion or motivation to modify the references or combine their teachings is found in either reference (not to mention the lack of structure sufficient to accomplish any such modification). It is hard to imagine how one using a device as taught in the Japanese document could make any use of the structures of Figures 7 of the Farrell patent as applied by the Examiner. This motivation is found solely within Applicant's disclosure (see *In re Vaeck*, supra).

As previously pointed out, the application of the Japanese document as applied by the Examiner under 35 USC section 103(a), and under the same law as cited above with regard to claims 1, 9 and 15 above, is felt to be error (see MPEP section 706.02, and *W.L. Gore and Associates v. Garlock, Inc.*, *Verdegaal Bros. v. Union Oil Co. of California*, *Richardson v. Suzuki Motor Co.*, and *In re Bond*, supra). Thus, because these claims are dependent upon one or another of the allowable independent claims, because no prima facie case of obviousness and been made, and because, in any case, what is specified in these claims is not taught by the combined references, it is felt these claims should be

allowed over the references, and reversal of the Examiner's rejection on this ground is respectfully requested.

Rejection Under 35 USC 103(a)

Claim 20

Dependent claim 20 is rejected under 35 USC 103(a) as being unpatentable over the teachings in the Japanese document cited above in view of the teachings in the U.S. Patent to Farrell and further in view of the teachings in the EPO Patent Document No. 0 052 264. The deficiencies in the Japanese document and Farrell patent are set forth hereinabove. The European document is cited for the teaching directed to a feeding container (vessel 1 in Figures) having positioning structures (a lid 2).

However, as before, there is little relationship between the systems in the Japanese document (a filter media sprout growth and harvesting arrangement), the Farrell apparatus and the EPO document, and thus a prima facie case of obviousness has not been made. There is no suggestion or motivation to modify the references or combine their teachings found in any of the combined references. This motivation is found solely within Applicant's disclosure (see In re Vaeck, supra).

As previously pointed out, the application of the Japanese document as applied by the Examiner under 35 USC section 103(a), and under the same law as cited above with regard to claims 1, 9 and 15 above, is felt to be error (see MPEP section 706.02, and *W.L. Gore and Associates v. Garlock, Inc.*, *Verdegaal Bros. v. Union Oil Co. of California*, *Richardson v. Suzuki Motor Co.*, and *In re Bond*, supra). Thus, because claim 20 is dependent upon allowable independent claim 15, because no prima facie case of obviousness and been made, and because, in any case, what is specified in the claim is not taught by the combined references, it is felt claim 15 should be allowed over the combined references, and reversal of the Examiner's rejection on this ground is respectfully requested.



CLAIMS APPENDIX

The following are the claims involved in this appeal (all rejected claims):

1. A seed germination and plant supporting utility comprising:

a spacer having a central opening therethrough between first and second sides of said spacer; and

mesh secured on both of said sides of said spacer, wherein said mesh is held spaced apart a selected distance by said spacer and enshrouds said central opening, said mesh having mesh openings of a size small enough to directly support a seed thereon at said first side of said spacer and to be securely engaged by plant root growth therethrough at said second side of said spacer.

2. The utility of claim 1 further comprising a first retainer associable with said spacer at one of said sides thereof for holding said mesh thereat.

3. The utility of claim 2 further comprising a second retainer associable with said spacer at another of said sides thereof for holding said mesh thereat.

4. The utility of claim 1 wherein said spacer is ring shaped having an inside diameter and outside diameter, wherein said mesh includes first and second

fiber swathes each with a diameter greater than said inside diameter of said spacer and each positioned at a different one of said sides of said spacer.

5. The utility of claim 4 further comprising first and second removable retainer rings each receivable over a different one of said sides of said spacer and holding said fiber swathes thereat.

6. The utility of claim 1 wherein said mesh at one of said sides of said spacer has a mesh size greater than mesh size of said mesh at another of said sides of said spacer.

7. The utility of claim 1 wherein said spacer includes first and second spacer components each defining a part of said central opening and with each having a different one of said sides of said spacer thereat, said first and second spacer components each having an interfacing surface configured to abut one another and surrounding said central opening spaced from said different one of said sides thereat, said mesh also maintained between said interface surfaces.

8. The utility of claim 1 further comprising a maintenance platform having an opening therethrough for receiving and locating said spacer and said mesh when assembled.

9. A seed germination and plant supporting utility comprising:

a first spacer having a passageway therethrough between first and second ends of said first spacer;

a first mesh swathe positioned at said first end of said first spacer and having mesh openings of a size small enough to directly support a seed thereon, and a second mesh swathe positioned at said second end of said first spacer and having mesh openings of a size small enough to be securely engaged by plant root growth therethrough; and

first and second retainers securable to said first spacer at said first and second ends thereof, respectively, adjacent to said first and second mesh swathes positioned thereat to retain said first and second mesh swathes at said first and second ends of said first spacer, each of said retainers having an opening therethrough in correspondence with said first spacer passageway when associated with said first spacer.

10. The utility of claim 9 further comprising a second spacer having a passageway therethrough between first and second ends of said second spacer, a third mesh swathe positioned at said first end of said second spacer, and a third retainer associable with said second

spacer at said first end thereof adjacent to said third mesh swathe thereat, said third retainer having an opening therethrough in correspondence with said second spacer passageway when associated with said second spacer, said second retainer configured to be associable with both said first and second spacers at said second ends thereof.

11. The utility of claim 10 wherein said first and third retainers each include a retaining lip adjacent to said openings therethrough configured to abut said first ends of said first and second spacers, respectively, to thereby anchor said first and third mesh swathes.

12. The utility of claim 9 further comprising a maintenance platform having an opening therethrough, said first retainer comprising a resilient yet deformable material configured to be securely receivable in said opening through said maintenance platform, and said second retainer comprising a lip at said opening through said maintenance platform.

13. The utility of claim 9 wherein said first and second retainers each include a retaining lip adjacent to said opening therethrough configured to abut a respective one of said first and second ends of said first spacer

when associated therewith to thereby anchor said first and second mesh swathes positioned thereat.

14. The utility of claim 13 wherein said spacer is ring shaped, and wherein each of said first and second retainers are defined by a ring shaped body configured to be fit over a respective one of said first spacer ends, said retaining lip extending annularly from one end of said ring shaped body inwardly at said opening therethrough.

15. A seed germination and plant supporting utility comprising:

a spacer ring having a central opening therethrough between opposite ends of said spacer ring, said spacer ring having an inside diameter adjacent said central opening and outside diameter;

first and second mesh each with a diameter greater than said inside diameter of said spacer ring and each positioned at a different one of said opposite ends of said spacer ring, said first mesh having mesh openings of a size small enough to directly support a seed thereon and said second mesh having mesh openings of a size small enough to be securely engaged by plant root growth therethrough; and

retaining means at each of said opposite ends of said spacer ring for retaining said first and second mesh at said opposite ends of said spacer ring;

wherein said first and second mesh are held spaced apart a selected distance by said spacer ring and enshroud said central opening.

16. The utility of claim 15 wherein said retaining means comprise first and second removable retainer caps having an opening therethrough each receivable over a different one of said opposite ends of said spacer ring and anchoring said first and second mesh thereat.

17. The utility of claim 15 wherein said first mesh has a mesh size greater than mesh size of said second mesh.

18. The utility of claim 15 wherein said spacer ring includes first and second spacer components each defining a part of said central opening and with each having a different one of said opposite ends of said spacer ring thereat, said first and second spacer components each having an interfacing surface configured to abut one another and surrounding said central opening spaced from said different one of said opposite ends thereat, said utility further comprising a third mesh maintained between said interface surfaces.

19. The utility of claim 15 further comprising a maintenance platform having a plurality of openings therethrough, said platform openings for receiving and locating multiple ones of said spacer ring, said first and second mesh and said retaining means when assembled.

20. The utility of claim 19 further comprising a containment and feeding apparatus and a positioning structure, said positioning structure having stations configured to receive said maintenance platform with said openings through said platform exposed from both above and below said platform and said positioning structure, said positioning structure configured to be received at said containment and feeding apparatus with said openings through said platform exposed from below to operations of said containment and feeding apparatus.

EVIDENCE APPENDIX

No evidence has been submitted pursuant to 37 CFR sections 1.130, 1.131 or 1.132.



RELATED PROCEEDINGS APPENDIX

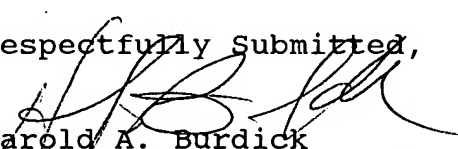
No related proceedings.

CLOSING REMARKS

The Office date of receipt of the Notice of Appeal is August 8, 2005, which is also the date for calculating response and filing periods in this appeal (37 CFR 41.37; MPEP 1205.01). The period for filing this Appeal Brief has been extended (for two months, from October 8, 2005 to December 8, 2005) by Petition for Extension of the Period for Response and fee (\$225.00 for a small entity) submitted herewith. Also, accompanying this Brief, is the fee for filing an Appeal Brief (\$250.00 by a small entity). Our Check No. 5763 in the total amount of \$475.00 is enclosed.

In view of the foregoing, it is felt that all of the claims in this Application are allowable, and accordingly, reversal of the Examiner's rejection of these claims, together with an order to pass this Application to issue, is respectfully solicited.

Respectfully Submitted,

  
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